



Asbestos Requirements for Demolition and Renovation Projects

Air Pollution Control Program fact sheet

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Introduction

This document is one in a series of fact sheets designed to assist you in becoming aware of the Department of Natural Resources' asbestos requirements. This particular document contains information regarding how to determine if your demolition or renovation project is regulated by the department's air pollution control requirements. It will also help to explain the basic requirements for asbestos inspection, asbestos abatement, and for notification of regulated demolition and renovation projects. Asbestos waste disposal requirements are also covered.

Determining if Your Project Will Involve Regulated Structures

The first step in determining if your demolition or renovation project is regulated is to determine the type of structure that will be affected. The department regulates demolition and renovation projects involving institutional, commercial, public, industrial, or residential structures, installations or buildings. The only exception to this regulation is for a single residential structure that contains four dwelling units or less. Projects that involve two or more residential structures are not exempt. If the residential structure has been used during the course of its history for any purpose other than residential, such as being converted from residential to office use or converted from commercial to residential use then it is no longer exempt. Any single residential structure that is used in fire training exercises is not exempt.

Multiple residential structures being demolished as part of an urban or rural unsafe building or nuisance abatement program may be exempt if they are geographically dispersed from the remaining structures. The department residential structure to be geographically dispersed if it is greater than 500 feet from other structures involved in the demolition or renovation project. Also, the structure must have been used exclusively for residential purposes.

Inspection Requirements

Prior to demolition or renovation activities, regulated structures or those areas that will be subject to demolition or renovation activities must be thoroughly inspected to determine if any asbestos containing materials are present. This inspection must be performed by a Missouri-certified asbestos inspector. The inspector should identify all potential asbestos containing materials that may be disturbed by the demolition or renovation activity. Samples of the suspect materials should be collected and submitted for laboratory analysis to determine if they contain asbestos.

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The asbestos inspector can assume materials to be asbestos containing and avoid additional laboratory analysis. However, an inspector cannot make a determination that a suspect material is non-asbestos containing without laboratory analysis. The inspector should generate a report of his findings from the inspection. The report should indicate all suspect materials that were identified, as well as quantify the amount, location, category and condition of all asbestos containing materials. The report should also include a copy of the analytical results and chain of custody for all samples that were collected.

In the event that a building is structurally unsound, it may not be possible to thoroughly inspect the entire structure. An inspection should be performed in all areas of the building where it is safe to do so. The final inspection report should clearly indicate what areas, if any, were not inspected. These areas of the building will require special handling during demolition, which is explained later in this bulletin.

If you need assistance with finding a Missouri certified asbestos inspector, you may find a list of inspectors on the department's Web site at www.dnr.mo.gov/alpd/apcp/Asbestos.htm

Categories of Asbestos Containing Materials

There are three categories of asbestos containing materials that may be identified by an inspector.

- **Friable asbestos containing material**

Any material containing more than one percent asbestos that, when dry, can be crumbled, pulverized or reduced to powder by hand pressure. Examples of friable materials include sprayed or troweled materials such as acoustical ceiling spray or boiler insulation, paper pipe insulation and drop-in ceiling tile.

- **Category I nonfriable asbestos containing material**

Asbestos containing packings, gaskets, resilient floor covering and asphalt roofing products containing more than one percent asbestos. *(Any vapor barrier on resilient floor coverings such as sheet vinyl or tile is considered friable asbestos.)

- **Category II nonfriable asbestos containing material**

Any nonfriable material, other than category I materials, that contain more than one percent asbestos. Examples of category II materials include asbestos cement wall or roof shingles and cement pipe.

Depending on the type or category of the asbestos containing materials identified at a project and the forces that will eventually act upon them during demolition and renovation, the materials may or may not be regulated by the department's asbestos requirements. To determine the applicability of the department's asbestos requirements, one must determine if the asbestos from your project will meet the definition of Regulated Asbestos Containing Material (RACM).

Regulated Asbestos Containing Material (RACM) includes friable asbestos containing materials; category I nonfriable materials that have become or will become friable or have been subject to sanding, grinding, cutting, burning, or abrading; or category II nonfriable materials that have a high probability of becoming or that have become crumbled, pulverized or reduced to powder by the work practices utilized during the course of demolition or renovation.

Requirements for Abatement of Regulated Asbestos Containing Material

If the asbestos inspection conducted for your renovation or demolition project indicates 160 square feet, 260 linear feet, 35 cubic feet, or more of RACM (threshold quantities) will be impacted by demolition or renovation activities, then all of the RACM must be removed. This

removal must be performed by a Missouri registered asbestos abatement contractor. Abatement contractors are trained in the proper procedures for safely removing and disposing of asbestos containing material and may only employ workers who are trained and subsequently, certified by the department on their projects.

In the event that a building is structurally unsound and it is unsafe to either inspect the building to confirm that no asbestos is present or to remove any RACM identified, the building can be demolished without being inspected or having the RACM removed. However, the demolition must be performed using wet methods and must be performed by a Missouri registered asbestos abatement contractor. Upon completion of the demolition, the debris must be inspected by a Missouri-certified asbestos inspector or assumed to contain RACM. If the asbestos inspection reveals that no RACM is present in the debris, then the debris can be handled as normal demolition waste and be removed by a general demolition contractor. If the asbestos inspection reveals that RACM is present or it is assumed that RACM is present, then all of the demolition debris must be handled as asbestos containing waste, unless the RACM can be isolated from the rest of the debris. All asbestos containing waste must be kept wet until the debris is properly disposed of at an approved sanitary landfill. A registered asbestos abatement contractor must perform the removal of the debris. Upon completion of the debris removal, a site assessment must be done to determine that the area surrounding the demolition site has not been contaminated with asbestos.

If you need assistance with finding a Missouri registered asbestos abatement contractor, a list of contractors is on the department's Web site at www.dnr.mo.gov/alpd/apcp/Asbestos.htm

Requirements for Abatement of Nonfriable Asbestos Containing Materials

Most nonfriable materials are not considered RACM unless they are in poor condition or are rendered friable by improper work practices during demolition or renovation. Category I nonfriable materials can generally be left in place during demolition activities provided the method of demolition will not make the material friable. However, for certain types of category I materials, such as floor tile and linoleum, the department generally recommends removal prior to demolition as these materials could easily be rendered friable during the demolition process. Also, leaving these materials in place may increase the amount of material considered as asbestos waste and may increase the cost of disposal. If category I ACM is left in place, work practices must be implemented to ensure the material is not made friable during removal or demolition. Any activity that will result in the material being subject to sanding, grinding, cutting, abrading, or burning may cause the material to become subject to regulation, depending on the quantity of RACM involved.

If threshold quantities of category II materials will be impacted, then they must be removed prior to demolition or renovation activities. This removal must be performed in a manner that does not render the material friable. If the material is crumbled, pulverized or reduced to powder during the demolition or removal process, the material may become subject to regulation depending on the quantity of RACM involved.

The Occupational Safety and Health Administration (OSHA) has specific work practice standards for friable and nonfriable Category I and Category II asbestos containing materials. While the removal of nonfriable materials may not be regulated by the department, the material can still pose a safety risk if handled improperly. For any project involving asbestos, whether regulated by the department or not, the use of trained asbestos professionals that are familiar with the OSHA standards for any asbestos removal work should be considered.

In addition, nonregulated asbestos containing material is still considered a solid waste and must be properly disposed of at an approved landfill or transfer facility in accordance with the Solid Waste Management Law. You should contact the facility where you plan to dispose of your asbestos waste for additional information on how the material should be packaged and delivered to their facility for disposal.

Notification Requirements

There are two types of notifications required by the department in regard to demolition and renovation projects, asbestos abatement project notification and demolition project notification. Asbestos abatement project notifications must be submitted to the department at least 10 working days prior to the start of a regulated asbestos abatement project. This notification period allows the department the time it needs to prepare to inspect the project to ensure that it is being performed in compliance with all of the applicable requirements. In the case of emergency situations, the department can waive the 10 working day notification period. However, verbal notice must be provided to the department within 24 hours of the onset of the emergency that describes the nature and scope of the emergency, the measures that will be taken to mitigate the situation, and a schedule for asbestos removal. A written notice must then be submitted to the department within seven days of the onset of the emergency.

The second type of notification is demolition notification. Demolition notification must be provided to the department at least 10 working days prior to the demolition of any regulated structure. This notice is required even if there is no asbestos identified on your project. This notification period provides the department the opportunity to inspect the structure prior to demolition to ensure that all asbestos issues have been properly addressed. A copy of the asbestos inspection report must accompany this notification. In the event a structure is in danger of imminent collapse and has been ordered demolished by a state or local government agency, the department can waive the 10 working day notification period. In this case, notice should be provided as early as possible before, but no later than the following working day. A copy of the government order must also be included with the notification.

It is the obligation of both the owner and any contractors involved to ensure that these notices are provided to the department. Failure to submit the notification is in violation of the department's requirements. The department will issue an approval letter for all asbestos abatement and demolition project notifications for regulated projects. Owners or contractors performing these types of projects should not proceed with the project without this approval.

You may obtain copies of the required notification forms from the department's Web site at www.dnr.mo.gov/env/apcp/Asbestos.htm

Asbestos Waste Disposal Requirements

Asbestos waste from regulated projects involving threshold quantities of RACM must be handled in strict accordance with the department's requirements for asbestos waste disposal. Wastes from these projects must be handled by registered asbestos abatement contractors, who are trained in the provisions for proper waste disposal. These requirements include packaging the material in leak tight containers or wrapping and properly marking and labeling the bags with an asbestos warning label and the information for the generator of the waste. The material must be taken to an approved sanitary landfill or transfer station that accepts asbestos containing waste.

Nonfriable asbestos containing materials that are not made friable are not regulated by the department's asbestos requirements. However, this material is still considered a solid waste

and must be properly disposed of at an approved landfill or transfer facility in accordance with the Solid Waste Management Law. You should contact the facility where you plan to dispose of your asbestos waste prior to removal to determine any specific procedures for waste delivery (packaging, wetting, etc.).

Asbestos Contact Information

For more information on the department's asbestos requirements, you may contact the department's Air Pollution Control Program or one of the department's other offices with the following contact information:

Missouri Department of Natural Resources
Air Pollution Control Program
P.O. Box 176
Jefferson City, MO 65102
(573) 751-4817 - phone
(573) 751-2706 - fax
www.dnr.mo.gov/env/apcp

Other Department Offices

Kansas City Regional Office	Lee's Summit	(816) 622-7000
Northeast Regional Office	Macon	(660) 385-8000
St. Louis Regional Office	St. Louis	(314) 416-2960
Southeast Regional Office	Poplar Bluff	(573) 840-9750
Southwest Regional Office	Springfield	(417) 891-4300

Local Agencies

In Missouri, there are also four local agencies that have been delegated by the department to enforce the asbestos requirements. These local agencies may also have more stringent local ordinances that they enforce as well. Prior to performing a project in one of the following jurisdictions, you should contact the appropriate local agency to determine if any additional requirements apply.

Jurisdiction	Agency	Telephone
Kansas City proper	Kansas City Health Department, Air Quality Section	(816) 513-6314
St. Louis City proper	St. Louis Division of Air Pollution Control	(314) 613-7300
St. Louis County	St. Louis County Health Department	(314) 615-8923
Springfield proper	Springfield-Greene County Health Department	(417) 864-1662

Additional Asbestos Related Guidance Documents

For more specific information on the department's requirements in regard to asbestos, please reference the additional guidance documents listed below or contact the department or appropriate local agency at the contact information listed above. These documents are available for free download from the department's Web site at www.dnr.mo.gov/pubs/pubs.htm.

- *Asbestos: What is it and Why is it a Concern?* PUB2077
- *Management of Nonfriable Asbestos Containing Materials* PUB2156
- *Requirements for Fire Training Exercises Involving Structures* PUB2029
- *Natural Disaster Assistance for Missouri Citizens - How to Handle Asbestos Containing Debris* PUB2121